

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of ~~making a tobacco product~~ selecting a tobacco that produces a reduced expression of Sequestosome 1 in human cells comprising:

- (a) providing a first tobacco ~~product~~;
- (b) obtaining smoke from said first tobacco ~~product~~;
- (c) contacting a first isolated population of human cells with said smoke from said first tobacco ~~product~~;
- (d) measuring the level of expression of NM_003900 Sequestosome 1 in said first isolated population of human cells in response to said contact with said smoke from said first tobacco ~~product~~;
- (e) providing a second tobacco ~~product~~;
- (f) obtaining smoke from said second tobacco ~~product~~;
- (g) contacting a second isolated population of human cells with said smoke from said second tobacco ~~product~~;
- (h) measuring the level of expression of NM_003900 Sequestosome 1 in said second isolated population of human cells in response to said contact with said smoke from said second tobacco ~~product~~;
- (i) comparing the level of expression of NM_003900 Sequestosome 1 in said first isolated population of human cells measured in step (d) with the level of expression of NM_003900 Sequestosome 1 in said second isolated population of human cells measured in step (h); and
- (j) selecting identifying the tobacco product that produced has a reduced expression of NM_003900 Sequestosome 1 in an isolated population of human cells in response to contact with smoke from said tobacco.

2. (Currently Amended) The method of Claim 1, wherein said first tobacco ~~product~~ and said second tobacco ~~product~~ comprise a burley tobacco.

3. (Currently Amended) The method of Claim 1, wherein said first tobacco ~~product~~ and said second tobacco ~~product~~ comprise a flue tobacco.

4. **(Currently Amended)** The method of Claim 1, wherein said second tobacco ~~product~~ comprises a modified tobacco.
5. **(Cancelled).**
6. **(Currently Amended)** The method of Claim 1, wherein said first tobacco ~~product~~ is provided in a first cigarette and said second tobacco ~~product~~ are is provided in a second cigarette cigarettes.
7. **(Currently Amended)** The method of Claim 6, wherein said first cigarette and said second cigarette cigarettes comprise a filter.
8. **(Currently Amended)** The method of Claim 1, wherein said first and second isolated populations of human cells are normal human cells of the lung, mouth, or tongue.
9. **(Currently Amended)** The method of Claim 1, wherein said first and second isolated populations of human cells are normal human bronchial epithelial (NHBE) cells.
10. **(Currently Amended)** The method of Claim 1, further comprising measuring the level of expression of a second gene in said first and second isolated populations ~~population~~ of human cells after contacting said first and second isolated populations of human cells with said whole smoke.
11. **(Currently Amended)** The method of Claim 10, wherein said second gene is selected from the group consisting of: ~~AK054816~~ Ferritin heavy polypeptide, NM_005345 Heat Shock 70kD protein 1A, NM_003330 Thioredoxin reductase 1, NM_002133 Heme oxygenase (decycling) 1, and NM_000963 Prostaglandin-endoperoxide synthase 2.
- 12.-52. **(Cancelled).**
53. **(New)** The method of Claim 1, further comprising incorporating the tobacco identified in step (j) into a tobacco product.

54. (New) The method of Claim 53, wherein said tobacco product is a cigarette.
55. (New) The method of Claim 1, wherein said smoke is whole smoke.
56. (New) A method of identifying a tobacco that produces Sequestosome 1 expression in human cells comprising:
- (a) providing a tobacco;
 - (b) obtaining smoke from said tobacco;
 - (c) contacting a population of human cells with said smoke from said tobacco;
and
 - (d) measuring the level of expression of Sequestosome 1 in said population of human cells in response to said contact with said smoke from said tobacco.
57. (New) The method of Claim 56, wherein said human cells are cells of the lung, mouth, or tongue.
58. (New) The method of Claim 56, wherein said human cells are NHBE cells.
59. (New) The method of Claim 56, wherein said tobacco is provided in a cigarette.
60. (New) The method of Claim 59, wherein said cigarette comprises a filter.
61. (New) The method of Claim 56, wherein said smoke is whole smoke.